

Where do I fit into P2?

Pollution prevention does not stop at the factory. The people who are buying all of those products must also consider how much waste is generated by using a product. There are many ways consumers can minimize waste production, such as:

- Not buying things we really do not need;
- Reducing energy consumption;
- Buying reusable products rather than disposable ones;
- Conserving water;
- Using products made with less toxic materials;
- Buying products without wasteful packaging;
- Reusing and repairing things instead of throwing them away;
- Buying goods made from recycled materials; etc.



By understanding how materials flow through our environment, it is easier to come up with ways to reduce pollution. By closing the loop when we buy reused and recycled products we reduce waste. By

reducing waste and consumption, we reduce the demand for natural resources. This means that there will be more to go around for everyone, and at a lower cost to our economy.

For more information contact IDEM/OPPTA:
317-232-8172 or 800-988-7901 or on the web:
www.state.in.us/idem/oppta/p2/index.html

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Pollution Prevention: The Basics

Pollution prevention, or “P2”, is a way of looking at what causes waste and pollution and then figuring out the best way to reduce the pollution before it is created. Historically, when pollution was generated, people looked for ways to control pollution after it was created. Treating wastewater, filtering air emissions, and landfills for solid waste, are all methods of controlling pollution after it has already been created. Pollution prevention means avoiding pollution at the source rather than trying to control it afterwards. This is also called “Source Reduction”. We should always try to reduce waste first, and then recycle. This approach can save the environment and save money at the same time.

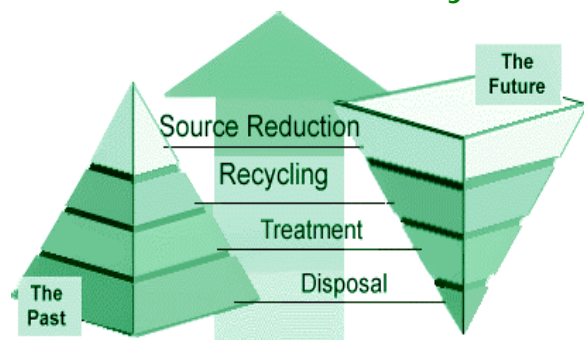
How does P2 Work?

All pollution is waste. Waste is simply raw materials that are not being used efficiently. Pollution prevention aims to identify activities or areas in processes where wastes don't need to be created, such as: where efficiency can be improved; where less-toxic materials can be substituted for more-toxic ones; and where energy, water, or other raw materials can be saved. These ideas apply to our daily lives as well as to businesses.

Pollution costs money. Traditionally, producers, consumers, and lawmakers have only considered the cost of treating and disposing of pollution.

Pollution is not only expensive to treat, it also takes energy and labor to make in the first place! In the long run, it costs less to avoid waste than to dispose of it.

The P2 Hierarchy



It is not practical to implement pollution prevention everywhere, all at once. The “P2 Hierarchy”, puts waste reduction priorities in the following order:

Source reduction; environmentally sound recycling; and as a last resort, treatment and disposal.

Always ask, “What can I do to reduce waste at the source first?”

What is NOT P2?

Controlling or treating pollution is NOT pollution prevention. When wastewater from homes or factories is treated, the water is cleaner, but the factory is left with a sludge or by-product that must be disposed, often in a landfill. When an electric power plant runs “Scrubbers” to clean the waste coming out of the smokestacks, they are left with rail cars full of dirty wastewater. Even trash and wastewater from our houses contains toxic materials that are eventually disposed of on land. Most materials disposed of on land end up in groundwater and our waterways, eventually.

Pollution Control and Treatment often moves the pollution from one medium (air, water, land) to

another medium. This is what is known as cross-media transfer of waste. The same amount of waste is created, but we are simply moving it from one place in the environment to another.

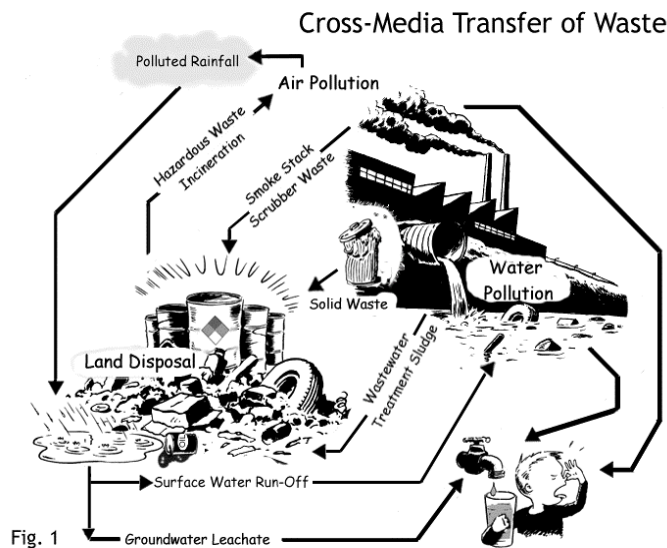


Fig. 1

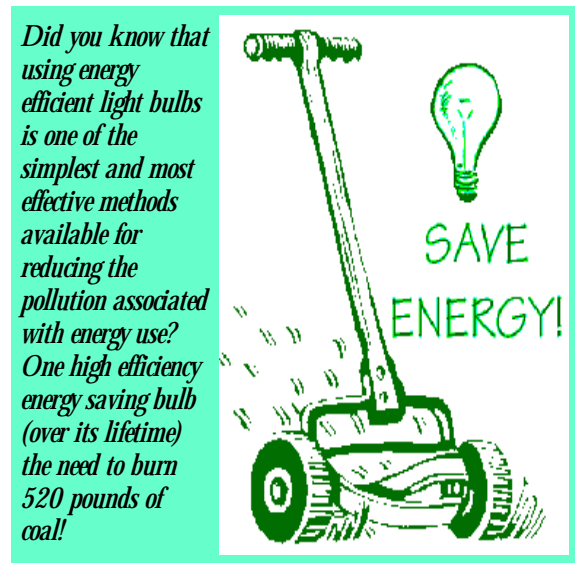
In some cases, the volume or toxicity of the waste has been reduced. In other cases, the movement of the waste in the environment has been reduced. However, the same amount of waste is generated at the source. This pollution still causes environmental damage, takes a lot of money, time and energy to deal with, and most importantly, it was still created in the first place. P2 aims to reduce the total amount of waste created before it has to be treated.

Where does Energy Fit into P2?

Using energy is one of the largest sources of waste and pollution; however, our society is dependent on energy. Emissions from fossil fuel power plants, automobiles, strip mining, and nuclear waste are all pollution which result from energy use.

Pollution Prevention also promotes increasing our reliance on renewable energy sources, such as solar, geothermal, and biofuels (crop-based fuels).

Pollution prevention programs look for ways to improve energy efficiency in everything from heating and air conditioning, to more efficient automobiles and electric motors, and lighting. Energy efficiency reduces pollution to air, water, and land.



P2 and Sustainability

Very little in nature is wasted, and waste from one organism almost always is useful to another. We can say that nature is *self-sustaining*. Humans have chosen a *non-sustainable* approach. Our life-style depends on a constant flow of natural resources from the earth. These precious resources are limited and not renewable. We must learn to eliminate waste, recycle resources, and develop sustainable sources of energy. By using P2, we help make energy and resource use more sustainable.